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Knowledge Sharing and Dissemination among Academics in Nigerian Universities: Patterns and Trends

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ABSTRACT

The paper investigates the phenomenon of knowledge sharing among academic staff in the four Nigerian universities, namely Bayero University, Kano; University of Maiduguri; University of Ibadan; and University of Porthacourt. The quantitative approach was used in the study to randomly administer questionnaire on three hundred and sixty four (364) academic staff in the four universities. The study found the evidence of knowledge sharing among academics in the four universities through workshops, seminars and conferences, membership of professional associations/societies and readiness to share knowledge and other resources with colleagues. The study serves as springboard for universities and their lecturers in Nigeria to re-evaluate and re-strategise the present scenario, particularly regarding use of modern technologies to increase awareness, communication and networking for improved research and teaching activities, since knowledge sharing is a critical factor in the survival of educational institutions across the globe.

Keywords: Knowledge sharing, Knowledge dissemination, Scholarly communication, Academic staff, Nigerian universities.

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I. Introduction

Knowledge is increasingly regarded as the critical resource of firms and economies (Becerra-Fernandez and Sabherwal, 2001; Davenport and Prusak, 1998; Nonaka and Takeuchi, 1995), and a more valuable asset to organizations than physical resources and capital (Davenport and Prusak, 1998; Sveiby, 1996). Knowledge has always been an important factor in organizations, but only recently is it being considered the primary source of competitive advantage (Kogut and Zander, 1996) and crucial to organizational success (Leonard-Barton, 1995; Nonaka and Takeuchi, 1995; Stewart, 1997). This trend is reflected in the increased knowledge content of work and the increasing numbers of individuals who are considered knowledge workers (Stewart, 1997). With knowledge being considered the most vital resource of organizations, issues related to the management of knowledge are gaining prominence in both theory and practice.

Since knowledge is increasingly perceived as being commercially valuable and its ownership is being recognized by individuals and the organizations in which

they work (Brown and Woodland, 1999; Weiss, 1999) and therefore, knowledge sharing has been identified as critical to the management of knowledge in organizations. Knowledge sharing guarantees a link between the individual and the organization by transferring knowledge that is embedded on individuals to the organizational level where it is converted into economic and competitive value for the organization (Hendriks, 1999). Cohen and Levinthal (1990) advocated that interactions between individuals who possess diverse and different knowledge enhance the organization's ability to innovate, far beyond what any one individual can achieve. Boland and Tenkasi (1995) concurred with this idea and submitted that competitive advantage and product success in organizations is the result of individuals with diverse knowledge collaborating synergistically towards common outcomes.

II. Statement of the Problem

Individuals in organizations have always created and shared knowledge and therefore knowledge sharing was considered to be an activity that took place automatically. Knowledge sharing is a dynamic process mediated by

complex factors that exist at the organizational, group, and individual levels (Andrews and Delahaye, 2000; Davenport and Prusak, 1998) and should not be taken for granted in organizations.

Despite the importance of the role of individual knowledge and the need for this knowledge to be shared effectively, relatively little empirical research sheds light on the nature of individual knowledge in Nigerian universities and how academics in their work settings share this knowledge. In line with these trends, knowledge sharing among academics in Nigeria universities has been severely hampered due to inadequate awareness about the importance of knowledge sharing in academic community and poor attitude of academic staff to the ideal of sharing knowledge with one another (Lawal, Agboola, Aderibigbe, Owolabi and Bakare, 2014). Hence, this study was carried out to bring to the fore the actual problem.

III. Objective of the Study

The main objective of the study was to investigate the practice of knowledge sharing in the four Nigerian universities. The main objective was further sub-divided in to the following specific objectives;

- Identify the platforms for sharing of knowledge among academics in Nigerian universities
- Determine how academics in Nigerian universities interact with colleagues on scholarly matters within and outside their universities

IV. Review of Related Literature

Organizational human capital is valuable because human resources differ in their knowledge, skills, and capabilities, and they are amenable to value-creation activities guided and coordinated by organizational strategies and managerial practices (De Saa'-Pe'rez and Garcí'a-Falco'n, 2002; Lado and Wilson, 1994; Wright, McMahan, and McWilliams, 1994). Several authors of knowledge management (Cross and Baird, 2000; Davenport, 1997; Hickins, 1999) posit that knowledge sharing revolves around and is primarily concerned about people, and would therefore involve adaptations to the social dynamics of the workplace rather than technology per se. In addition to that, knowledge sharing includes both the process of sharing or providing knowledge to others and obtaining knowledge for one's own use as explained by Wilkesmann, Wilkesmann, and Virgilitto (2009b). For example, large multinationals are known to have KM-related programmes whose strategies focus on the cultivation and enhancement of a knowledge sharing culture within the organization (Riege, 2005). In addition, most knowledge sharing practices will be less effective and slower without the adequate support of IS/IT systems. Riege (2005) explained that it has been widely recognized that the main challenge of knowledge sharing practices is to protect and maximize the value derived from tacit knowledge held by the various stakeholders in the firm.

Boh (2006) in a study of mechanisms for sharing knowledge in project-based organizations highlighted that personalization versus codification and individualization

versus institutionalization are two distinct dimensions of knowledge-sharing mechanisms. Individualized knowledge-sharing mechanisms are informal and unstructured, while institutionalized knowledge-sharing mechanisms are formal and embedded in organizational routines and structure. Yu-chu, Yi-ling and Yu-Hua (2012) in a study of knowledge sharing among university students in Taiwan, using three variables of knowledge sharing, knowledge internalization, and knowledge creation. The findings from both quantitative and qualitative analyses suggest the following. The blended knowledge management model is effective in improving knowledge, dispositions, and abilities of creativity. The online sharing and evaluation of creative products, learning communities and discussions, and the practice of creativity strategies have substantial effects on all three aspects of creativity. The observation and peer evaluation of group assignments and creativity-related feedback enhance the learning of knowledge and dispositions.

Uchenna, Gerald, Choon and Tiong, (2013) studied the knowledge sharing among SMEs in Malaysia using 680 manufacturing sector participants from the SME Corporation Malaysia business directory. The results indicate that knowledge technology, motivation, effective reward systems, trust and empowering leadership explain up to 60.2 percent of the variance observed in attitude towards knowledge sharing. It was also found that attitude towards knowledge sharing influences intention to share knowledge with an R^2 of 0.387. In a related study of knowledge sharing and transfer patterns among group-affiliated companies, Jeoung, Young-Ryeol, Pervez and Byung (2014) found five distinct groups of innovative knowledge transfer patterns, i.e., 1) small inactivator, 2) hyperactive transferor, 3) laissez faire exploiter, 4) hands-on exchange avoider, and 5) moderate researcher. While the cluster and post-hoc regression analyses support the main hypotheses, i.e., 1) there will be differences in patterns of innovative knowledge transfer strategies of globalized GACs within chaebols; and 2) these differences will influence the performance of foreign subsidiaries.

V. Methodology

The main methodologies or research approaches in social research include the quantitative, the qualitative (Babbie and Mouton, 2001; Creswell, 2008; Sheppard, 2004) and mixed methods research (Creswell and Plano, 2007; Greene, 2008; Teddlie and Tashakkori, 2009). In this study, quantitative approach through survey research design was used to collect data from the population of academic staff. As listed in Table 1, total of three hundred and sixty four (364) academic staff from four (4) Federal Universities located across the two regions of Nigeria (South and North) were selected for the study. The universities are Bayero University, Kano; University of Maiduguri; University of Ibadan; and University of Port Harcourt. Stratified sampling technique was used to randomly select sample for the study. This allows the researcher divide (stratify) the population into two: i. Universities in Northern Nigeria ii. Universities in Southern Nigeria. Stratified sampling technique guarantees that the sample will include specific

characteristics that the researcher wants included in the sample (Creswell, 2008).

TABLE I
RELATIVE POPULATIONS AND CORRESPONDING SAMPLE SIZES OF THE UNIVERSITIES

S/No.	University	Establishment	Region	Academic staff	Sample
1.	Bayero University, Kano	1975	North	10, 60	90
2.	University of Maiduguri	1975	North	10, 14	86
3.	University of Ibadan	1948	South	1,122	95
4.	University of Porthacourt	1975	South	10, 93	93
	Total			4, 289	364

The population of this study is 4, 289 According to Israel (2012), if the population is 4, 289 at $\pm 5\%$ precision, the sample should be 364 at the 95% confidence level.

The sample of each university was calculated proportionately, using a formula recommended by Krejcie and Morgan (1970) as represented below:

$$\frac{N \times S}{TP}$$

Where,

N = Number (i.e. population of each institute)

S = Sample T (total sample size)

P = Population

As listed in Table 2, based on this formula, the distribution of samples across the five research institutes is;

$$\text{B. U. K. } \frac{10, 60}{4, 289} \times 364 = 90$$

$$\text{UNIMAID } \frac{10, 14}{4, 289} \times 364 = 86$$

$$\text{U. I. } \frac{1, 122}{4, 289} \times 364 = 95$$

$$\text{UNIORT } \frac{10, 93}{4, 289} \times 364 = 93$$

For the collection of data, Congress Meetings of respective branch chapters of the umbrella body of Nigerian university academics, known as Academic Staff Union of Universities (ASUU), was used to randomly administer questionnaire to the academics and collect data for the study. Generally, the questionnaire was organised in sections A-C, covering questions 1-9. The issues covered the following themes: interaction on scholarly matters; membership of professional association; collaboration and communication; means of communicating research work.

The data collected from the survey was sorted, scrutinised, edited and analysed using the Statistical Package for Social Sciences (SPSS) version 20.0 for Windows 7, to generate descriptive statistics, including percentages and frequency. The frequency and percentage displayed a number of occurrences side-by-side with the corresponding percentage, as well as relating this to the variables used in the research.

VI. Results and Discussion

a. The Profile of Respondents

In this subsection, the respondents' profile, namely university, gender, discipline, educational qualification and academic rank, are presented.

TABLE II
UNIVERSITY OF RESPONDENTS

Name of University				
University	Freq	%	Valid %	Cumulative %
Bayero University, Kano	90	24.7	24.7	24.7
University of Maiduguri	86	23.6	23.6	48.4
University of Ibadan	95	26.1	26.1	74.5
University of Porthacourt	93	25.5	25.5	100.0
Total	364	100.0	100.0	

The distribution of academics on the basis of universities revealed that 90 (24.7%) were drawn from Bayero University, Kano, 86 (23.6%) University of Maiduguri, 95 (26.1%) University of Ibadan, while 93 (25.5%) were selected from the University of Porthacourt. The results show that respondents from University of Ibadan are greater in number, followed by the University of Porthacourt, while the total sample stood at three hundred and sixty four. The gender distribution of the respondents given in Table 3 reveals that 275 (75.5) were male academics, while 89 (24.5%) were females. The overall results indicate that the majority of the respondents were males.

TABLE III
GENDER OF RESPONDENTS

Gender of Respondents				
Gender	Freq	%	Valid %	Cumulative %
Male	275	75.5	75.5	75.5
Female	89	24.5	24.5	100.0
Total	364	100.0	100.0	

The study shows that 61 (16.8%) were in the discipline of agricultural sciences, 160 (44%) in the humanities and social sciences, while 56 (15.4%) were academics based in the medical sciences. The findings further revealed that 87 (23.9%) of the respondents were in science and technology. The results show that the majority 160 (44%) of the respondents were in the field of humanities and social sciences of the four universities. This may not be unconnected to the fact that the four universities were conventional universities, offering diverse field of knowledge, as against specialized universities.

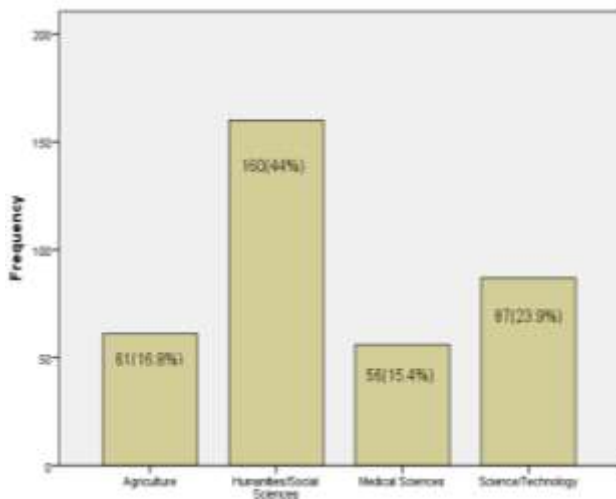


Fig. 1. Discipline of respondents

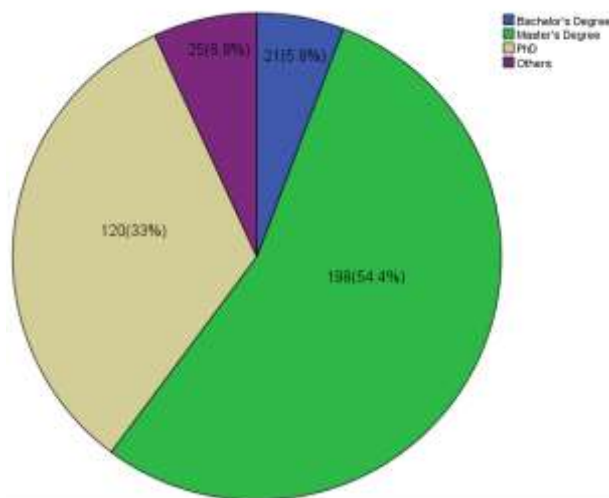


Fig. 2. Educational qualification of respondents

Figure 2 shows the educational qualification of the respondents in which 21 (5.8%) were primary/bachelor's degree holders and 198 (54.4%) had Master's degrees. One hundred and twenty (33%) had a PhD, while 25 (6.9%) were holders of other qualifications, such as postgraduate professional diplomas and postgraduate medical qualifications. The distribution of their academic status shows that majority of the respondents were holders of Master's and Doctorate Degrees.

TABLE IV
ACADEMIC RANK OF RESPONDENTS

Academic Rank				
Rank	Freq	%	Valid %	Cumulative %
Assistant Lecturer	92	25.3	25.3	25.3
Lecturer	154	42.3	42.3	67.6
Senior Lecturer	62	17.0	4.7	72.3
Associate Professor	39	10.7	17.0	89.3
Professor	17	4.7	10.7	100.0
Total	364	100.0	100.0	

The distribution of respondents by academic rank reveals that 92 (25.3%) were at the rank of assistant lecturer, 154 (42.3%) either lecturer I or lecturer II, while

62 (17.0%) were senior lecturers. The result also shows that 39 (10.7%) were associate professors, while 17 (4.7%) at the rank of full professors in the four universities. The result shows that majority of the respondents 154 (42.3%) were either at the rank of lecturer I or lecturer II.

b. Interaction and Sharing of Knowledge

This subsection investigates the phenomenon of interaction and knowledge sharing among academics, in the four universities. Table 5 depicts the distribution of membership of professional association/society by the Nigerian university academics, where 38 (10.4%) said they are not members of any professional association, while 326 (89.6%) claimed to have been members of professional associations and societies. The findings show that majority of the respondents belonged to one or another professional association and this could provide a platform for interaction, thereby facilitating knowledge sharing activities in the universities.

TABLE V
MEMBERSHIP OF PROFESSIONAL ASSOCIATION

Membership of Professional Association/Society				
	Freq	%	Valid %	Cumulative %
No	38	10.4	10.4	10.4
Yes	326	89.6	89.6	100.0
Total	364	100.0	100.0	

Consistent to these findings, Hopkins (2011) studied the development of learned societies through history with a focus on the Regional Studies Association. The author showed that learned societies throughout history have emphasised knowledge and the challenge of dispersing it. To achieve this, learned societies have used publication of journals, reports and book series as well as conferences and meetings. Also related to findings of the present study, Mata, Latham and Ransome (2010) recounted their personal experiences as members of the Society for Public Health Education (SOPHE). They cited benefits of joining the society and attending the conferences which had allowed them access to a broad network of health educators and professional giving them more exposure and deeper understanding of their profession and the opportunities available to them. In their opinion, professional societies bring together members from the academy, students, practitioners and researchers (both senior and junior) who bring their unique perspectives, training and experiences to the interaction for professional development. Furthermore, a study by Duque, Ynalvez, Sooryamoorthy, Mbatia, Dzorgbo and Shrum (2005) showed that in comparing scientists in Kerala (India), Kenya and Ghana, Kenyan scientists were the least likely to hold an office in a professional association and generally attended fewer professional meetings. Such limitations ultimately impacted on the levels of knowledge creation and sharing among scholars. Having established the knowledge sharing activities among academics through membership of their respective professional association and societies, the study identifies the names of the associations and societies in the proceeding subsection.

c. Name of the Professional Association/Society

The study identifies the names of the professional associations and societies, as follows;

- Nigerian Society of Engineers
- Nigerian Academy of Science
- Nigerian Bar Association
- Nigeria Library Association
- Institute of Chartered Accountant
- Nigerian Institute of Management
- National Association of Library and Information Science Educators
- Institute of Genetic Chemistry and Laboratory Medicine
- Institute of Software Practitioners of Nigeria
- Institute of Human Virology
- Centre for Law and Development
- Computer Professional Registration Council
- Teachers' Registration Council
- Librarians' Registration Council
- Nigerian Medical Association
- Nigerian Institute of Social and Economic Research
- Science Teachers Association of Nigeria
- Pharmacist Council of Nigeria
- Nigerian Computer Society
- Association of National Accountant of Nigeria
- Institute of Certified Geographers of Nigeria
- Nigerian Institute of Public Relations
- Information Technology Association of Nigeria
- Medical and Dental Council of Nigeria
- Nigerian Association of Technology Teachers
- Academic Staff Union of Universities
- National Council for Exceptional Children
- National Association of Special Education Teachers
- Association of Medical Laboratory Science of Nigeria
- International Federation of Library Association and Institutions
- Counselling Association of Nigeria
- Nigerian Anthropological and Sociological Association
- Nigerian Political Science Association
- Historical Society of Nigeria
- American Studies Association of Nigeria
- African Studies Association
- Linguistic Association of Nigeria
- Association of Teachers of Arabic and Islamic Studies
- International League of Islamic Literature, Kingdom of Saudi Arabia
- Forestry Association of Nigeria
- International Farm Management Association
- Agricultural Economics Society of Nigeria
- Agricultural Society of Nigeria
- Nigerian Rural Sociological Association
- Nigerian Society for Microbiology
- Science Association of Nigeria
- Mycotoxicology Society of Nigeria

Based on the membership of the above numerous professional associations and societies, the academics in the four universities have good platforms for the sharing and dissemination of knowledge, and this has the capacity to trigger the growth of knowledge and innovation.

d. Patterns of Interaction on Scholarly Matters

The respondents were asked to indicate how they interact with their colleagues on scholarly matters. The result is embedded in Table 6.

TABLE VI
INTERACTION WITH COLLEAGUES ON SCHOLARLY MATTERS

Spend time with colleagues to discuss ideas, solutions and scientific proposals				
	Freq	%	Valid %	Cumulative %
<i>Never</i>	13	3.6	3.6	3.6
<i>Rarely</i>	13	3.6	3.6	7.1
<i>Sometimes</i>	83	22.8	22.8	29.9
<i>Always</i>	255	70.1	70.1	100.0
Total	364	100.0	100.0	
Holding of professional meetings with colleagues in department based on a pre-planned schedule				
<i>Never</i>	84	23.1	23.1	23.1
<i>Rarely</i>	144	39.6	39.6	62.6
<i>Sometimes</i>	103	28.3	28.3	90.9
<i>Always</i>	33	9.1	9.1	100.0
Total	364	100.0	100.0	
Holding of professional meetings with colleagues from other departments based on pre-planned schedule				
<i>Never</i>	63	17.3	17.3	17.3
<i>Rarely</i>	198	54.4	54.4	71.7
<i>Sometimes</i>	75	20.6	20.6	92.3
<i>Always</i>	28	7.7	7.7	100.0
Total	364	100.0	100.0	
Willingness of colleagues to share knowledge and resources with others				
<i>Never</i>	13	3.6	3.6	3.6
<i>Rarely</i>	77	21.2	21.2	24.7
<i>Sometimes</i>	127	34.9	34.9	59.6
<i>Always</i>	147	40.4	40.4	100.0
Total	364	100.0	100.0	

Based on the findings: discussing ideas, solutions and scientific proposal with colleagues was cited by 13(3.6%) as never, 13(3.6%) as rarely, 83(22.8%) sometimes, while 255(70.1%) always; holding of professional meetings with colleagues in your department based on a pre-planned schedule 84(23.1) said never, 144(39.6%) rarely, 103(28.3%) sometimes and 33(9.1%) always; holding of professional meetings with colleagues from other departments based on a pre-planned schedule 63(17.3%) never, 198(54.4%) rarely, 75(20.6%) sometimes, and 28(7.7%) as always; willingness of colleagues sharing knowledge and resources with others 13(3.6%) never, 77(21.2%) rarely, 127(34.9%) sometimes and 147(40.4%) always.

Similar to findings of the present study, Ridzuan, Sam and Adanan (2008) examined knowledge management practices in higher learning institutions in Sarawak. The study showed that although universities were places where knowledge sharing occurred freely, knowledge sharing and dissemination was only happening moderately. The study by Ridzuan et al. (2008) also found that academics were hesitant to share knowledge with people outside their research areas or in other departments of the university since they did not attach much importance to the various aspects of knowledge management such as knowledge sharing.

In this regard, Garfield (2006) outlines 10 reasons that may prevent people from sharing knowledge in organisations: people are unwilling to share knowledge when they do not know why they should share it; when

they do not know how to do it; when they do not know what they are supposed to do; when they think the recommended way will not work; when they think their way is better; when they think something else is more important; when there is no positive consequence to them for doing it; when they are rewarded for not sharing and when they are punished for doing it.

VII. Conclusion

Knowledge sharing revolves around and is primarily concerned about people, and would therefore involve adaptations to the social dynamics of the workplace rather than technology per se. The present study concludes that knowledge sharing is a common phenomenon in the four universities through membership of professional associations/societies, discussion of ideas with colleagues, solutions and scientific proposals; and voluntary disposition exhibited by academics in the sharing of knowledge and other resources with their colleagues.

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